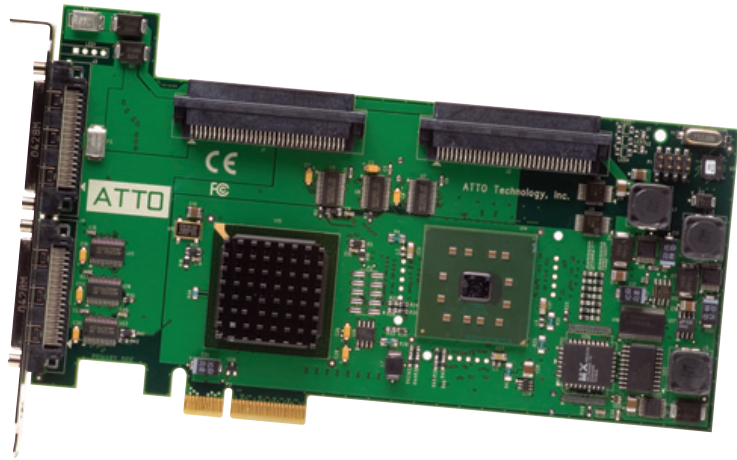


# ATTO ExpressPCI UL5D



## Dual-channel Ultra320 SCSI PCI Express Host Adapter

*The UL5D dual-channel Ultra320 PCI Express adapter is the latest addition to the ATTO ExpressPCI family of high-performance SCSI host adapters for data-intensive environments. This latest generation adapter boasts data-transfer rates of up to 320 MB/sec. per channel and offers support for PCI Express busses. It is an ideal fit for high-bandwidth environments such as multiple stream, high-definition video applications as well as enterprise servers and high-end workstations running high-volume, mission-critical applications such as messaging and databases. Only ATTO ExpressPCI host adapters feature the exclusive Advanced Data Streaming (ADS™) Technology that allows fast and efficient data movement with reduced CPU utilization.*

## TECHNICAL HIGHLIGHTS

- Ultra320 SCSI
- Up to 320 MB/sec. per channel data-transfer rates
- Dual independent SCSI channels
- x4 PCI Express
- Exclusive ADS™ Technology
- Supports up to 30 SCSI bus IDs
- Up to 12 meter cable lengths

ATTO

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## Hardware Specifications

### SCSI Interface:

- 320 MB/sec. per channel data-transfer rates
- Two (2) external VHDCI and two (2) internal high-density connectors per channel
- Low Voltage Differential (LVD) signaling
- Support for tagged command queuing
- Backward compatible with Ultra 160, Ultra2, Ultra/WIDE, Fast/WIDE and Narrow SCSI devices

### Advanced SCSI:

- Double transition clocking
- Domain validation
- Cyclical Redundancy Checking (CRC)
- Packetization
- Quick Arbitration Select (QAS)
- ASPI compliant (for PC users)
- Bootable from attached disks
- Support for disconnect/reconnect
- Support for multiple block sizes

### General Characteristics:

- Automatic termination
- Upper-byte termination for Narrow devices
- Flash ROM for easy field upgrades
- Plug and play compatible
- Includes ATTO ExpressPro-Tools™ and ATTO Configuration Tool formatting and utility software

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## Software Specifications

### Driver Support:

- Windows Server 2003
- Windows XP
- Windows® 2000
- Linux
- Mac OS X
- Novell Netware V6.5

### Advanced Data Streaming (ADS™):

- Improved PCI system bandwidth use
- Optimized SCSI-3 algorithms
- Tagged command queuing
- Embedded RISC I/O processor

### RAID kits available

## Environmental and Physical Characteristics

### Dimensions:

- Length 7.5"
- Height 4.376"

### Operating Environment:

- Temperature: 0-45° C
- Humidity: 10-90% non-condensing
- Airflow: 100 LFM (min)

### Reliability:

- MTBF = 150,000 hours
- MTTR < 15 Minutes

### Power:

- 1.61 typical/2.03 max. Amps @ + 3.3 VDC
- 0.65 typical/ 1.46 Amps @ + 12.0 VDC

### RoHS Compliant

## SCSI Host Adapter Selection Chart

SCSI Host Bus Adapters	Ultra320 SCSI		
FEATURES	UL5D	UL4D	UL4S
Max. Transfer Rate (MB/sec.)	640	640	320
Low Voltage Differential	•	•	•
Single-Ended SCSI	•	•	•
Number of SCSI Channels	2	2	1
Number of SCSI IDs Supported	30	30	30
Large File Transfers	•	•	•
Cable Distances	12.5	12.5	12.5
Uncompressed Video	•	•	•
32-bit PCI Compatible	–	•	•
64-bit PCI Compatible	–	•	•
33 MHz PCI	–	•	•
66 MHz PCI	–	•	•
133 MHz PCI-X	–	•	•
x4 PCI Express	•	–	–
Windows® 2000/XP/Server 2003	•	•	•
Linux	•	•	•
Mac OS X Support	•	•	•
Novell Netware Support	•	•	•
RoHS compliant version	•	•	•